SAFETY DATA SHEET



1. Identification

Product identifier	ERTECH 2031-LV
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.
Manufacturer/Importer/Suppl	ier/Distributor information
Company Name	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
Address	2829 Lakeland Drive
	Jackson, MS 39232
	USA
After hours telephone number	1-800-222-7122
Normal work hours telephone number	1-877-982-7667
Website	www.ergonarmor.com
E-mail	sds@ergon.com
Emergency 24-hour telephone number	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
Information on operation hours	8:00 a.m. to 5:00 p.m.

2. Hazard(s) identification

Physical hazards	Not classified.		
Health hazards	Not classified.		
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	The mixture does not meet the criteria for classification.		
Precautionary statement			
Prevention	Observe good industrial hygiene practices.		
Response	Wash hands after handling.		
Storage	Store away from incompatible materials.		
Disposal	Dispose of waste and residues in accordance with local authority requirements.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	Not applicable.		

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	40 - 50
WATER		7732-18-5	40 - 50
QUARTZ		14808-60-7	< 2
KAOLIN		1332-58-7	< 10

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of asphalt. Wash contact areas with soap and water. If needed, seek medical attention.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO2).		
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire.		
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.		
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.		
Fire fighting equipment/instructions	ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.		
Specific methods	In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.		
General fire hazards	No unusual fire or explosion hazards noted.		

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic

autions for safe handling Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Conditions for safe storage, Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze.

8. Exposure controls/personal protection

including any

incompatibilities

Components	Туре	Value	Form
KAOLIN (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
US. OSHA Table Z-3 (29 Cl	EP 1910 1000)	15 mg/m3	Total dust.
Components	Туре	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limi			F
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction.
KAOLIN (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide			F
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.
KAOLIN (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
ological limit values	No biological exposure limits noted for	the ingredient(s).	
dividual protection measure Eye/face protection	engineering controls to maintain airbo limits have not been established, main es, such as personal protective equip Chemical goggles and face shield are n	tain airborne levels to an acce oment	ptable level.
	goggles).		
Skin protection			
Hand protection	Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.		
Other	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact. Plastic or rubber gloves, apron and boots.		
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.		
Thermal hazards	Wear appropriate thermal protective c	lothing, when necessary.	
eneral hygiene onsiderations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		
. Physical and chemical	properties		
opearance	Heavy-consistency emulsion.		
Physical state	Liquid.		
Form	Liquid.		
Color	Brown		
lor	Mild Petroleum Odor		
dor threshold			
JOI THRESHOLD	n/a		

Melting point/freezing point

pН

5 - 7

n/a

Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	> 212.0 °F (> 100.0 °C)
Evaporation rate	n/a
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	explosive limits
Flammability limit - lower (%)	n/a
Flammability limit - upper (%)	n/a
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	60 mm Hg at 100°F, approx.
Vapor density	n/a
Relative density	n/a
Solubility(ies)	
Solubility (water)	Slightly
Partition coefficient (n-octanol/water)	n/a
Auto-ignition temperature	> 400 °F (> 204.44 °C)
Decomposition temperature	n/a
Viscosity	15000 cP
Viscosity temperature	77 °F (25 °C)
Other information	
Density	9.00 - 10.00 lb/gal
Flammability class	Combustible IIIB estimated
Specific gravity	1.1 - 1.2
VOC	0.2 lb/gal maximum
10 Chability and yes stiri	4a -

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.		
Chemical stability	Stable under normal temperature conditions.		
Possibility of hazardous reactions	Hazardous polymerization does not occur.		
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat product.		
Incompatible materials	Strong oxidizing agents.		
Hazardous decomposition products	Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide.		

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.		
Skin contact	No adverse effects due to skin contact are expected.		
Eye contact Harmful in contact with eyes.			
Ingestion Expected to be a low ingestion hazard.			
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.		

Information on toxicological effects

Components	Species	Test Results	
KAOLIN (CAS 1332-58-7)			
<u>Acute</u>			
Dermal			
LD50	Rat	> 5000 mg/kg	
Oral			
LD50	Rat	> 5000 mg/kg	
* Estimates for product may I	be based on additional component	data not shown.	
Skin corrosion/irritation	Prolonged skin contact may caus	e temporary irritation.	
Serious eye damage/eye irritation	Harmful in contact with eyes. No	ne known.	
Respiratory or skin sensitizati	on		
Respiratory sensitization	Not available.		
Skin sensitization	May cause skin disorders if conta	ct is repeated or prolonged.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are unavailable.		
IARC Monographs. Overal	l Evaluation of Carcinogenicity		
ASPHALT (CAS 8052-42-4 QUARTZ (CAS 14808-60-	,	B Possibly carcinogenic to humans. Carcinogenic to humans.	
US. National Toxicology P	rogram (NTP) Report on Carcin	ogens	
QUARTZ (CAS 14808-60- US. OSHA Specifically Reg	7) k ulated Substances (29 CFR 191	ínown To Be Human Carcinogen. I 0.1001-1050)	
Not regulated.			
Reproductive toxicity	Not classified.		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not available.		
Chronic effects	Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/chapping and oil acne.		
Further information	This product has no known adve	rse effect on human health.	
12. Ecological information	on		
Ecotoxicity	Not expected to be harmful to ac	quatic organisms.	
Product	Species	Test Results	

	Species	Test Results
EC50	Daphnia	9803.9219 mg/l, 48 hours estimated
LC50	Fish	37930.2852 mg/l, 96 hours estimated
		EC50 Daphnia

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. No components are identified as hazardous wastes. Disposal recommendations are based on uncontaminated material.	
Local disposal regulations	Dispose in accordance with all applicable regulations.	
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Not applicable.	
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Avoid discharge into water courses or onto the ground.	
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.	
14. Transport information		

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4)

Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4)	Listed: January 1, 1990
QUARTZ (CAS 14808-60-7)	Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

ASPHALT (CAS 8052-42-4) QUARTZ (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date Version #	06-29-2017 01
Further information NFPA ratings	HMIS® is a registered trade and service mark of the NPCA. Health: 1 Flammability: 1 Instability: 0
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	Product and Company Identification: Alternate Trade Names Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Regulatory Information: United States